



February 7, 2017

Mr. Dennis Curran FGS/CMT 136 Maine Ave Bangor,ME 04401

RE: Katahdin Lab Number: SK0729

Project ID: Highlander Center
Project Manager: Ms. Kristen Schultz
Sample Receipt Date(s): January 27, 2017

Dear Mr. Curran:

Please find enclosed the following information:

- * Report of Analysis (Analytical and/or Field)
- * Quality Control Data Summary
- * Chain of Custody (COC)
- * Login Report

A copy of the Chain of Custody is included in the paginated report. The original COC is attached as an addendum to this report.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. The results contained in this report relate only to the submitted samples. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Please go to http://www.katahdinlab.com/cert.html for copies of Katahdin Analytical Services Inc. current certificates and analyte lists.

Sincerely,

KATAHDIN ANALYTICAL SERVICES

Authorized Signature

02/07/2017

Date

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

- U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.
 - Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.
- Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.
- D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.
- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

or

- J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.
- B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
- C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).
- L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.
- M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.
- N Presumptive evidence of a compound based on a mass spectral library search.
- A Indicates that a tentatively identified compound is a suspected aldol-condensation product.
- P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).





Client: FGS/CMT Lab ID: SK0729-1RA Client ID: 24HR IA ID#1 Project: Highlander Center

SDG: SK0729

Lab File ID: A3797.D

Sample Date: 24-JAN-17 Received Date: 27-JAN-17 Extract Date: 01-FEB-17

Extracted By: AAB **Extraction Method:** TO 15

Lab Prep Batch: WG199288

Analysis Date: 01-FEB-17

Analyst: AAB

Analysis Method: EPA TO-15

Matrix: AR % Solids: NA

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Vinyl Chloride	U	0.11	ug/m3	1	.5	1.3	0.11
1,1-Dichloroethene	U	0.13	ug/m3	1	.5	2.0	0.13
trans-1,2-Dichloroethene	U	0.13	ug/m3	1	.5	2.0	0.13
1,1-Dichloroethane	U	0.097	ug/m3	1	.5	2.0	0.097
cis-1,2-Dichloroethene	U	0.17	ug/m3	1	.5	2.0	0.17
1,2-Dichloroethane	U	0.10	ug/m3	1	.5	2.0	0.10
1,1,1-Trichloroethane	U	0.16	ug/m3	1	.5	2.7	0.16
Trichloroethene	U	0.091	ug/m3	1	.5	2.7	0.091
Tetrachloroethene		30.	ug/m3	1	.5	3.4	0.26





Client: FGS/CMT Lab ID: SK0729-2DL3

Client ID: 20MIN SVB SLAB SS#1

Project: Highlander Center

SDG: SK0729

Lab File ID: A3799.D

Sample Date: 24-JAN-17 Received Date: 27-JAN-17 Extract Date: 01-FEB-17

Extracted By: AAB **Extraction Method:** TO 15

Lab Prep Batch: WG199288

Analysis Date: 01-FEB-17

Analyst: AAB

Analysis Method: EPA TO-15

Matrix: AR % Solids: NA

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Vinyl Chloride	U	8.1	ug/m3	3.7863	.5	97.	8.1
1,1-Dichloroethene	U	9.6	ug/m3	3.7863	.5	150	9.6
trans-1,2-Dichloroethene	U	9.6	ug/m3	3.7863	.5	150	9.6
1,1-Dichloroethane	U	7.4	ug/m3	3.7863	.5	150	7.4
cis-1,2-Dichloroethene	U	13.	ug/m3	3.7863	.5	150	13.
1,2-Dichloroethane	U	8.0	ug/m3	3.7863	.5	150	8.0
1,1,1-Trichloroethane	U	12.	ug/m3	3.7863	.5	210	12.
Trichloroethene	J	13.	ug/m3	3.7863	.5	200	6.9
Tetrachloroethene		6400	ug/m3	3.7863	.5	260	20.





Client: FGS/CMT Lab ID: SK0729-2DL4

Client ID: 20MIN SVB SLAB SS#1

Project: Highlander Center

SDG: SK0729

Lab File ID: A3800.D

Sample Date: 24-JAN-17 Received Date: 27-JAN-17 Extract Date: 01-FEB-17

Extracted By: AAB

Extraction Method: TO 15 **Lab Prep Batch:** WG199288

Analysis Date: 01-FEB-17

Analyst: AAB

Analysis Method: EPA TO-15

Matrix: AR % Solids: NA

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Vinyl Chloride	U	0.20	ug/m3	3.7863	.5	2.4	0.20
1,1-Dichloroethene	U	0.24	ug/m3	3.7863	.5	3.8	0.24
trans-1,2-Dichloroethene	U	0.24	ug/m3	3.7863	.5	3.8	0.24
1,1-Dichloroethane	U	0.18	ug/m3	3.7863	.5	3.8	0.18
cis-1,2-Dichloroethene	U	0.32	ug/m3	3.7863	.5	3.8	0.32
1,2-Dichloroethane	U	0.20	ug/m3	3.7863	.5	3.8	0.20
1,1,1-Trichloroethane	U	0.30	ug/m3	3.7863	.5	5.2	0.30
Trichloroethene		12.	ug/m3	3.7863	.5	5.1	0.17
Tetrachloroethene	E	1100	ug/m3	3.7863	.5	6.4	0.50





Form 4 Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services **SDG :** SK0729

Project: Highlander Center

Lab Sample ID: WG199288-2

Lab File ID: A3796.D

Date Analyzed: 01-FEB-17

Instrument ID: AIR1

Time Analyzed: 11:05

Heated Purge: No

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG199288-1	A3794.D	02/01/17	09:01
24HR IA ID#1	SK0729-1RA	A3797.D	02/01/17	11:50
20MIN SVB SLAB SS#1	SK0729-2DL3	A3799.D	02/01/17	14:01
20MIN SVB SLAB SS#1	SK0729-2DL4	A3800.D	02/01/17	15:46





Client:

Lab ID: WG199288-2

Client ID: Method Blank Sample

Project: SDG: SK0729

Lab File ID: A3796.D

Sample Date: Received Date:

Extract Date: 01-FEB-17

Extracted By: AAB **Extraction Method:** TO 15

Lab Prep Batch: WG199288

Analysis Date: 01-FEB-17

Analyst: AAB

Analysis Method: EPA TO-15

Matrix: AR % Solids: NA

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL	
Vinyl Chloride	U	0.11	ug/m3	1	.5	1.3	0.11	
1,1-Dichloroethene	U	0.13	ug/m3	1	.5	2.0	0.13	
trans-1,2-Dichloroethene	U	0.13	ug/m3	1	.5	2.0	0.13	
1,1-Dichloroethane	U	0.097	ug/m3	1	.5	2.0	0.097	
cis-1,2-Dichloroethene	U	0.17	ug/m3	1	.5	2.0	0.17	
1,2-Dichloroethane	U	0.10	ug/m3	1	.5	2.0	0.10	
1,1,1-Trichloroethane	U	0.16	ug/m3	1	.5	2.7	0.16	
Trichloroethene	U	0.091	ug/m3	1	.5	2.7	0.091	
Tetrachloroethene	U	0.26	ug/m3	1	.5	3.4	0.26	





LCS Recovery Report

Client:

Lab ID: WG199288-1 Client ID: LCS

Project: SDG: SK0729

LCS File ID: A3794.D

Sample Date: Analysis Date: 01-FEB-17
Received Date: Analyst: AAB

Extract Date: 01-FEB-17 Analysis Method: EPA TO-15

Extracted By: AAB **Matrix:** AR **Extraction Method:** TO 15 **% Solids:** NA

Lab Prep Batch: WG199288 **Report Date:** 03-FEB-17

Compound	Recovery (%)	Conc Added	Conc Recovere	ed Conc Units	Limits
Vinyl Chloride	108.	5.00	5.40	ppb/v	70-130
1,1-Dichloroethene	98.0	5.00	4.90	ppb/v	70-130
trans-1,2-Dichloroethene	96.0	5.00	4.80	ppb/v	70-130
1,1-Dichloroethane	102.	5.00	5.10	ppb/v	70-130
cis-1,2-Dichloroethene	100.	5.00	5.00	ppb/v	70-130
1,2-Dichloroethane	114.	5.00	5.70	ppb/v	70-130
1,1,1-Trichloroethane	110.	5.00	5.50	ppb/v	70-130
Trichloroethene	110.	5.00	5.50	ppb/v	70-130
Tetrachloroethene	92.0	5.00	4.60	ppb/v	70-130

Katahdin Analytical Services, LLC.				Sample Receipt Condition Report						
Client: FG5/CMT			KAS PM:				Sampled By: Chient			
Project:			кім	S Entry	ву: <	(")	Delivered By: KA			
KAS Work Order#: SK 0729			KIM	S Revie	w By:	(A)	Received By:			
SDG #:	Cooler:		of	· · · · · · · · · · · · · · · · · · ·		Date/Time	e Rec.: 1 27 17 1430			
Receipt Criteria	····	Υ	N	EX*	NA	Com	ments and/or Resolution			
Custody seals present / intact?	 						The division is a second of the second of th			
Chain of Custody present in cooler?			-		V					
Chain of Custody signed by client?						·	CALLED TO THE COLUMN TO THE CO			
Chain of Custody matches samples?		~					N-8			
5. Temperature Blanks present? If no temperature of any sample w/ IR gun.	t, <u>t</u> ake					Temp (°C):				
Samples received at <6 °C w/o free	zing?					Note: Not requi	ired for metals (except Hg soil) analysis.			
Ice packs or ice present?					-		ce or ice packs (i.e. no attempt to			
If yes, was there sufficient ice to me temperature requirements?	eet				2	not meet cer	tain regulatory requirements and te certain data.			
If temp. out, has the cooling proces (i.e. ice or packs present) and sam collection times <6hrs., but samples yet cool?	ole						oling process required for metals oil) analysis.			
6. Volatiles:							10.44444			
Aqueous: No bubble larger than a pea	?		<u> </u>	ļ						
Soil/Sediment: Received in airtight container?										
Received in methanol?						***				
Methanol covering soil?				ļ						
D.I. Water - Received within 48 hour H	Γ?									
Air: Refer to KAS COC for canister/flow controller requirements.		√ifa	ir inclu	ded						
7. Trip Blank present in cooler?	······									
8. Proper sample containers and volum	e?	-								
9. Samples within hold time upon receil	ot?									
10. Aqueous samples properly preserve Metals, COD, NH3, TKN, O/G, phe TPO4, N+N, TOC, DRO, TPH – pH Sulfide - >9 Cyanide – pH >12	nol,)()					
* Log-In Notes to Exceptions: docur	nent any p	robler	ns wit	h sam	iples o	or discrepand	cies or pH adjustments.			
·					,	£ =	, , ,			

Katahdin Katahdin	900 Technology way P.O. Box 540 Scarborough, ME 040 Tel: (207) 874-2400	may : 04070 00 Fax: (207) 775-4029	~		Ana	ysis	で こ こ	5	3	stody	
	Contact: Den	7) 414	10 AV	_	Ph.	ione: 20	27 - GC	818.0		Fах:	-	
N 4		ري ک	30 Y WK		-	Stai	te: N	الدر		Zip:	04491	
	Project N	\overline{a}	1,60	AM CT	ر ا ا	345	G	E-mail:	d Co	6 4 5	25 gs cmx	
			,									ı
3			\ \ \ \ \	(and desired to the state of the	Copies To). Semisemente	SVENING SET CONTRIBUTED		Managar Market
		y									SASSA SASTA SA	SERVING SERVING
	39 KAS Projec	ot Manager:								Requ	ested Services	
Fed-Ex	Mail	Drop-O	! I	7087	(0)							C
							Total State of State			10 1 11		comm
	Collection			ļ				Flow	51			ents
Date	Start End Time Time	Initial Vac	Final Vac		Sampler.	Size	Can ID	Controller ID	o T	AND STATE OF THE S	REPLECED THE SECOND STATE OF THE SECOND STATE	5
r1/82/11	11:36 11:32	30.0	90 O		70	j J	2015	0250	>>	'	21-01	
1/24/17	11:54 R:11	27.5	4,,,,,,,,,,		٥٢	_	Dodd	0147	X		1/2/00/10 P/20	ويبس
7											- Compounds	
											methos	
											Sino	
											·····	
	F											
Date/Time: (1-50	Received By:	Kinh		inquished	By:			Date/Time.		Received	ву:	
equipment i sipment, whi equipment equipment.	ncluding, but not lim ich is the sole prope is missing and/or da	nited to, canis irty of Kataho imaged, by s	sters and din. All ec igning this	flow cor quipmen s COC,	ntrollers I it will be you (the	before b inspecte client) a	eing sen of for da igrees to	t to the cl mage and pay Kata	ient. As comple Indin fo	s the cli leteness r replac	ent you have agreed topon return to ement of any	d to
	Sampler (Print/Sign): Dxnn, schifferent): Sample (Print/Sign): Dxnn, schifferent): Sample Description (Sample Description (S	Ted-Ex Mail Scarborough, ME Tel: (207) 874-24 Contact: Den Scarborough, ME Tel: (207) 874-24 Contact: Den Project N Anil Fed-Ex Mail Time Time Time Time Time Time Time Time	1.0. Box 540 Scarborough, ME 04070 Tel: (207) 874-2400 Fax: (207) Scarborough, ME 04070 Tel: (207) 874-2400 Fax: (207) Scarborough, ME 04070 Tel: (207) 874-2400 Fax: (207) Scarborough, ME 04070 Contact: D cn n lst	110 Scarborough, ME 04070 E S Tei. (207) 874-2400 Fax: (207) 775-4028 Contact: D CNALLS (VCCAN) Contact: D CNALLS (VCCAN) Contact: D CNALLS (VCCAN) Contact: D CNALLS (VCCAN) Fed-Ex Mail Drop-Off P, 2 Collection Collection Collection Time Final Final Final Time Vac Vac 8.6 [22] 1 1:3 1:3 2 3 3 3 3 3 3 3 3	Date Start Fed-Ex Marix Drop-Off P, ck up Ed-Ex Ed-Ex Marix Drop-Off P, ck up Ed-Ex Ed-Ex Marix Drop-Off P, ck up Ed-Ex Ed	In Scarborough, ME 04070 Pro. Box 540 Pax: (207) 874-2400 Fax: (207) 775-4029 Pro. Box 540 Pax: (207) 874-2400 Fax: (207) 775-4029 Pro. Box 742-2400 Project Name/No: High Annager: Contact Dennity City: Box 75 Project Name Start	In P.O. Box 840 Pax (2017 7754029 Phone: 26	Date Time Air Air Air Air Analysis Anal	Date Time Project Name(No. High Mark Sampler Control Control	Air Analysis Chain of State	Air Analysis Chain of Cu Scanowown Ne Gustro State: Wh. E. Project Name/No: High Mark & State: Wh. E. Frail: Acv. c. An.	Project Name/No. High with fig. Final State Project Name/No. High with fig. Contact Denote Denote



Katahdin Analytical Services

Login Chain of Custody Report (Ino1)

Jan. 27, 2017 03:22 PM

Login Number: SK0729

Account: FGS001

FGS/CMT

Project: FGSAIR Air Testing

Primary Report Address: Dennis Curran

FGS/CMT 136 Maine Ave

Bangor,ME 04401 Primary In Voice Address:

Sharon Cormier FGS/CMT 136 Maine Ave

Bangor, ME 04401 Report CC Addresses:

Invoice CC Addresses:

NoWeb

Login Information:

Quote/Incoming: FGSAIR

ANALYSIS INSTRUCTIONS : ND to MDL for TO 15

CHECK NO.

CLIENT PO#

CLIENT PROJECT MANAGE:

CONTRACT

COOLER TEMPERATURE : n/a DELIVERY SERVICES : KAS

: KAS064QC-XLS EDD FORMAT

LOGIN INITIALS : \$0 : KSS PM

PROJECT NAME : Highlander Center

QC LEVEL : ||+ REGULATORY LIST

: email pdf and invoice to dennis, no HC, merge REPORT INSTRUCTIONS

results for EDD, email invoice also to

Page: 1 of 1

lcall@fgscmt.com

SDG ID

SDG STATUS

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SK0729-1	24HR IA ID#1	24-JAN-17 11:32	27-JAN-17			08-FEB-17	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle (ount	Comments
Air Air	S CANISTER_RENTAL S TO-15-S	23-FEB-17	Canister				
SK0729-2	20MIN SVB SLAB SS#1	24-JAN-17 12:14	27-JAN-17			08-FEB-17	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle (Count	Comments
Air Air	S CANISTER_RENTAL S TO-15-S	23-FEB-17	Canister				

Total Samples: Total Analyses: